

AMENDED VERSION

IN THE CLAIMS:

1. (Currently amended) A method of affecting new neuron growth in a patient comprising the steps of:

administering post ischemic event to a patient in need thereof a therapeutic amount of a therapeutic compound selected from the group of L-arginine, sildenafil, statins, and phosphodiesterase inhibitors for increasing levels of cGMP to a patient in need of neurogenesis; ~~wherein increased levels of cGMP result in~~ affecting new neuron growth; and identifying increased numbers of new neurons.

2-5. (Canceled)

6. (Currently amended) A method of augmenting the production of neurons in a patient by administering post ischemic event to a patient in need thereof an effective amount of a therapeutic compound selected from the group of L-arginine, sildenafil, statins, and phosphodiesterase inhibitors that ~~increases~~ increase levels of cGMP, to a site in need of augmentation; ~~wherein increased levels of cGMP augment~~ augmenting the production of new neurons; and identifying increased numbers of new neurons.

7. (Currently amended) A method of increasing neurological function in a patient by administering post ischemic event to a patient in need thereof an effective amount of a therapeutic compound selected from the group of L-arginine, sildenafil, statins, and phosphodiesterase inhibitors that ~~increases~~ increase levels of cGMP to a patient in need of increased neurological function after neurological damage has occurred; ~~whereby the increased levels of cGMP create~~ creating new neuron growth; ~~thereby~~ increasing neurological function; and identifying increased numbers of new

neurons.

8. (Currently amended) A method of increasing cognitive and neurological function in a patient by administering post ischemic event an effective amount of a therapeutic compound selected from the group of L-arginine, sildenafil, statins, and phosphodiesterase inhibitors for increasing levels of cGMP to a patient in need of increased cognitive and neurological function after neurological and cognitive damage has occurred; ~~whereby the increased levels of cGMP create~~ creating new neuron growth; ~~thereby increasing cognitive and neurological function; and identifying increased numbers of new neurons.~~

9-13. (Canceled)

14. (New) A method of affecting new neuron growth in a patient comprising the steps of:

administering post ischemic event to a patient in need thereof a therapeutic amount of a therapeutic compound selected from the group of sildenafil, statins, and phosphodiesterase inhibitors for increasing levels of cGMP to a patient in need of neurogenesis; and affecting new neuron growth.

15. (New) A method of augmenting the production of neurons in a patient by administering post ischemic event to a patient in need thereof an effective amount of a therapeutic compound selected from the group of sildenafil, statins, and phosphodiesterase inhibitors that increase levels of cGMP, to a site in need of augmentation; and augmenting the production of new neurons.

16. (New) A method of increasing neurological function in a patient by administering post ischemic event to a patient in need thereof an effective amount of a therapeutic compound selected from the group of sildenafil, statins, and phosphodiesterase inhibitors that increase levels of cGMP to a

patient in need of increased neurological function after neurological damage has occurred; creating new neuron growth; and increasing neurological function.

17. (New) A method of increasing cognitive and neurological function in a patient by administering post ischemic event an effective amount of a therapeutic compound selected from the group of sildenafil, statins, and phosphodiesterase inhibitors for increasing levels of cGMP to a patient in need of increased cognitive and neurological function after neurological and cognitive damage has occurred; creating new neuron growth; and increasing cognitive and neurological function.